



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/666,750

09/18/2003

Thomas H. Yu

GECZ 2 00522-1

8006

7590

07/13/2004

Timothy E. Nauman
FAY, SHARPE, FAGAN,
MINNICH & McKEE, LLP
1100 Superior Avenue, 7th Floor
Cleveland, OH 44114-2518

EXAMINER

ZIMMERMAN, GLENN

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/666,750

Applicant(s)

YU ET AL.

Examiner

Glenn Zimmerman

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10 and 13-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,5-10 and 13-19 is/are allowed.
- 6) ☒ Claim(s) 3,4,20 and 21 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>May 20, 2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I claims 1, 3-10 and 13-21 in the reply filed on May 24, 2004 is acknowledged.

Drawings

The drawings are objected to because if figure 3 in the Y-axis on the left, the examiner notes that the "e" in "Life" is missing. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

A substitute specification excluding the claims is required pursuant to 37 CFR 1.125(a) because the current copy received has lost many letters within because of what the examiner would conclude is due to the scanning and/or faxing of the document.

A substitute specification filed under 37 CFR 1.125(a) must only contain subject matter from the original specification and any previously entered amendment under 37 CFR 1.121. If the substitute specification contains additional subject matter not of record, the substitute specification must be filed under 37 CFR 1.125(b) and (c)

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3 and 4 depend from canceled claim 2, which is indefinite.

Claim 21 recites the limitation "the mixture" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

A 112 2nd paragraph rejection has been determined for claim 3, as written about above. However, a further evaluation of the claim will be done while interpreting "claim 2" in line 1 as "claim 1".

A 112 2nd paragraph rejection has been determined for claim 4, as written about above. However, a further evaluation of the claim will be done while interpreting "claim 2" in line 1 as "claim 1".

A 112 2nd paragraph rejection has been determined for claim 21, as written about above. However, a further evaluation of the claim will be done while interpreting "the mixtures" in lines 1-2 as "a mixture of the fill gas".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Shaffer U.S. Patent 4,898,558.

Regarding claim 20, Shaffer teaches a lamp comprising (**col. 5 lines 67-68**): a light transmissive envelope (**aluminosilicate tubing col. 6 line 1**); at least one filament (**col. 6 lines 5-7**) within the envelope, the at least one filament being formed from tungsten; and a fill gas sealed (**col. 3 line 50**) within the envelope and comprising an inert gas (**col. 6 lines 4-5**), a halogen-containing compound (**col. 6 line 4**) and a silicon-

Art Unit: 2879

containing compound (**col. 6 lines 19-21**) for gettering oxygen within the envelope, wherein the silicon-containing compound is present in a sufficient amount to maintain oxygen or an oxygen containing compound for promoting the tungsten halogen cycle in the envelope during operation of the lamp (**col. 1 lines 28-34**). Oxygen is a necessary constituent in a tungsten-halogen cycle lamp. The examiner notes that promoting and maintain are relative words. The lamp works and oxygen is a necessary constituent in a tungsten-halogen cycle lamp therefore maintaining is met.

Allowable Subject Matter

Claims 1, 5-10 and 13-19 are allowed.

Claims 3, 4 and 21 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 21 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 1, the following is an examiner's statement of reasons for allowance: The prior art of record neither shows nor suggests a lamp including the combination of all the limitations as set forth in claim 1, and specifically wherein the atomic ratio of silicon to halogen in the mixture is from 0.1 to about 0.5 could not be found elsewhere in prior art.

Regarding claims 3-10 and 19, claims 3-10 and 19 are allowed for the reasons given in claim 1, because of their dependency status on claim 1.

Regarding claim 13, the following is an examiner's statement of reasons for allowance: The prior art of record neither shows nor suggests a lamp including the combination of all the limitations as set forth in claim 13, and specifically wherein the silicon-containing compound is present in a sufficient amount to maintain a lumen per watt efficiency of at least 60% of that of an equivalent lamp formed without a silicon-containing compound could not be found elsewhere in prior art.

Regarding claims 14-18, claims 14-18 are allowed for the reasons given in claim 13, because of their dependency status on claim 13.

Regarding claim 21, the following is an examiner's statement of reasons for allowance: The prior art of record neither shows nor suggests a lamp including the combination of all the limitations as set forth in claim 21, and specifically wherein the atomic ratio of silicon to halogen in a mixture of the fill gas is from 0.1 to about 0.5 could not be found elsewhere in prior art.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Millner U.S. Patent 1,944,825 discloses an Electric Incandescent Lamp. Shaffer European Patent Application 0 328 065 A2 discloses an Improved getter for Incandescent lamps. Shaffer U.S. Patent 4,923,424 discloses Incandescent Lamps Including a Combined Getter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn Zimmerman whose telephone number is (571) 272-2466. The examiner can normally be reached on M-W 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh D Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Glenn Zimmerman


Vip Patel
Primary Examiner
AU 2879